

4.5 AGRICULTURE AND SOILS

This subsection describes agricultural production and soil conditions in the proposed Project area and explains land productivity classifications used to determine Project effects. It then identifies potential impacts from Project construction and operations and proposes mitigation measures. Additionally, cumulative Project impacts and the proposed alternatives' impacts on agricultural and soil resources are evaluated relative to the Project.

4.5.1 Environmental Setting

4.5.1.1 State Overview

California agriculture generated approximately \$27.5 billion in farm value in 2002 and has been the nation's top agricultural state in cash receipts every year since 1948 (California Farm Bureau Federation 2004; University of California Agricultural Issues Center 2000). More than one-third of California agricultural land is used for crops, while almost two-thirds is used for grazing land.

4.5.1.2 Agriculture Along Pipeline Routes

Center Road Pipeline

The proposed Center Road Pipeline route and its alternatives are located in the Oxnard plain of Ventura County, California. In 2002, the agricultural industry in Ventura County generated approximately \$1.16 billion per year (Ventura County Agricultural Commissioner 2002). According to the California Department of Finance (2002), 29 percent of the total land area in the county, or 346,000 acres (140,000 hectares [ha]), was dedicated to agricultural use in 1997. The top five crops for Ventura County in 2002 included (in descending order) strawberries, lemons, nursery stock, celery, and avocados (Ventura County Agricultural Commissioner 2002). Strawberries are the predominant crop along the proposed routes for the Center Road Pipeline and alternatives. Table 4.5-1 provides an overview of the types of agriculture along the Center Road Pipeline routes.

Approximately 85 percent of the lands adjoining the proposed route are in agricultural use. The U.S. Department of Agriculture (USDA) rates lands by agricultural potential. The first three categories, in descending order of potential, are prime farmland, farmland of statewide importance, and unique farmland. These are collectively classified as important farmland. The Center Road Pipeline and its alternatives would cross through or run adjacent to agricultural areas classified as areas of prime farmland and farmland of Statewide Importance. These designations, however, do not necessarily mean that the land is being used for agricultural purposes. There is no known unique farmland along the pipeline routes.

Table 4.5-1 Representative Agriculture Along the Proposed Center Road Pipeline Routes

Mileposts	Proposed Center Road Pipeline Route	Alternative 1	Alternative 2
0-1	Turf grass	Turf grass	Turf grass
1-2	Turf grass, root and vegetable crops	Turf grass	Turf grass, root and vegetable crops
2-3	Berries, strawberries, peppers, sod, fallow, row crops	Orchard, berries	Berries, strawberries, peppers, sod, fallow
3-4	Row crops, cabbage, berries, corn, tree crops	Berries	Row crops, cabbage, berries, corn, tree crops
4-5	Berries, corn, tree crops, fallow	Berries, seed	Berries, corn, tree crops, fallow
5-6	Row crops, berries, sod	Fallow	Row crops, berries, sod
6-7	Sod, row crops, fallow	Fallow, row crops	Fallow, row crops
7-8	Row crops, fallow	Not applicable (NA)	Fallow, row crops
8-9	Row crops, fallow, cabbage	Strawberries	Fallow, row crops
9-10	Orchard	Strawberries, orchard, row crops	Strawberries, fallow
10-11	Fallow, orchard	Orchard, strawberries, row crops	Fallow, orchard
11-12	Fallow	Fallow, strawberries	Orchard
12-13	Fallow, row crops	Fallow, turf grass, row crops	Fallow
13-14	Fallow, orchard	Orchard, strawberries, row crops	Orchard
14-Center Road Valve Station	Orchard	Orchard	Orchard

Source: Ecology and Environment, Inc. 2004

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2 Line 225 Pipeline Loop

3 The proposed Line 225 Pipeline Loop and its alternative would be located in the Santa
4 Clarita Valley of Los Angeles County. No cultivated agricultural lands are associated
5 with the Line 225 Pipeline Loop or its alternative. The Line 225 Pipeline Loop would
6 traverse 3.5 miles (5.6 kilometers [km]) of soils classified as prime farmland or farmland
7 of Statewide Importance, but they currently are not in agricultural use. There is no
8 known unique farmland along the pipeline routes.

9 4.5.1.3 Soil Conditions

10 The predominant soils beneath the area of the Center Road Pipeline and its alternatives
11 consist of loamy sand and sandy loam. *Loam* refers to soils comprising some mixture
12 of sand, silt, clay, and organic material. The predominant soils beneath the area of the

- 1 Line 225 Pipeline Loop and its alternative consist of alluvial- and river-transported
 2 sediments, sandy loam, loamy sand, loam, and sand. Specific soil types that have been
 3 identified along the pipeline routes are listed in Tables 4.5-2 and 4.5-3, and their
 4 locations are shown in Figures 4.5-1 and 4.5-2.

Table 4.5-2 Soil Types Along the Center Road Pipeline Routes and the Amount of Acres Disturbed

Miles (km)	Soil Association	Soil Capability/ Grade ^{1,2}	Farmland Type ³	Acres (Hectares) (50-foot [15-meter] right-of-way)
Center Road Pipeline				
0.1 (0.2)	Anacapa Sandy Loam (2-9 Percent Slopes) (AcC)	Ile-1/1	Prime	0.7 (0.3)
3.8 (6.1)	Camarillo Loam (Cd)	Ilw-2/2	Statewide Importance	23.1 (9.3)
1.1 (1.8)	Camarillo Loam, Sandy Substratum (Ce)	Ilw-2/2	Statewide Importance	6.5 (2.6)
1.4 (2.3)	Camarillo Sandy Loam (Cc)	Ilw-2/2	Statewide Importance	8.4 (3.4)
0.2 (0.3)	Cropley Clay (0-2 Percent Slopes) (CyA)	Ils-2/3	Prime	1.2 (0.5)
0.2 (0.3)	Garretson Loam (2-9 Percent Slopes) (GaC)	Ile-1/1	Prime	1.2 (0.5)
0.6 (1.0)	Gullied Land (GxG)	NA	Other	3.8 (1.5)
0.7 (1.1)	Hueneme Loamy Sand, Loamy Substratum (Hm)	Ilw-2/3	Prime	4.0 (1.6)
2.7 (4.3)	Hueneme Sandy Loam (Hn)	Ilw-2/2	Prime	16.5 (6.7)
1.4 (2.3)	Pacheco Silty Clay Loam (Pa)	Ilw-2/2	Statewide Importance	8.2 (3.3)
0.2 (0.3)	Rincon Silty Clay Loam (2-9 Percent Slopes) (RcC)	Ile-3/3	Prime	1.4 (0.6)
0.1 (0.2)	Sorrento Loam (2-9 Percent Slopes) (SwC)	Ile-1/1	Statewide Importance	0.1 (0.04)
0.2 (0.3)	Zamora Loam (2-9 Percent Slopes) (ZmC)	Ile-1/1	Statewide Importance	1.2 (0.5)
		Total	Statewide Importance	47.6 (19.3)
		Total	Prime	25.0 (10.1)
Center Road Pipeline Alternative 1				
1.53 (2.5)	Anacapa Sandy Loam (0-2 Percent Slopes) (AcA)	Ils-4/1	Prime	9.3 (3.8)
0.62 (1.0)	Anacapa Sandy Loam (2-9 Percent Slopes) (AcC)	Ile-1/1	Prime	3.8 (1.5)
1.69 (2.7)	Camarillo Loam (Cd)	Ilw-2/2	Statewide Importance	10.2 (4.1)
0.4 (0.6)	Camarillo Loam, Sandy Substratum (Ce)	Ilw-2/2	Statewide Importance	2.4 (1.0)

Table 4.5-2 Soil Types Along the Center Road Pipeline Routes and the Amount of Acres Disturbed

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
1.27 (2.0)	Camarillo Sandy Loam (Cc)	IIw-2/2	Statewide Importance	7.7 (3.1)
0.2 (0.3)	Cropley Clay (0-2 Percent Slopes) (CyA)	IIs-5/3	Prime	1.2 (0.5)
0.2 (0.3)	Garretson Loam (2-9 Percent Slopes) (GaC)	Ile-1/1	Prime	1.2 (0.5)
0.58 (0.9)	Gullied Land (GxG)	NA	Other	3.5 (1.4)
0.15 (0.2)	Hueneme Loamy Sand, Loamy Substrate (Hm)	IIw-1/3	Prime	0.9 (0.4)
3.78 (6.1)	Hueneme Sandy Loam (Hn)	IIw-2/2	Prime	22.9 (9.3)
0.95 (1.5)	Metz Loamy Sand (0-2 Percent Slopes) (Mea)	IIIs-4/2	Prime	5.8 (2.3)
0.8 (1.3)	Pacheco Silty Clay Loam (Pa)	IIw-2/2	Statewide Importance	4.8 (1.9)
1.88 (3.0)	Pico Sandy Loam (0-2 Percent Slopes) (PcA)	IIs-4/1	Prime	11.4 (4.6)
0.39 (0.6)	Pico Sandy Loam (2-9 Percent Slopes) (PcC)	Ile-1/2	Prime	2.4 (1.0)
0.23 (0.4)	Rincon Silty Clay Loam (2-9 Percent Slopes) (RcC)	Ile-3/3	Prime	1.4 (0.6)
0.13 (0.2)	Sorrento Loam (2-9 Percent Slopes) (SwC)	Ile-1/1	Statewide Importance	0.8 (0.3)
0.2 (0.3)	Zamora Loam (2-9 Percent Slopes) (ZmC)	Ile-1/1	Statewide Importance	1.2 (0.5)
		Total	Statewide Importance	27.2 (11.0)
		Total	Prime	60.2 (24.2)
Center Road Pipeline Alternative 2				
0.12 (0.2)	Anacapa Sandy Loam (2-9 Percent Slopes) (AcC)	Ile-1/1	Prime	0.7 (0.3)
3.84 (6.2)	Camarillo Loam (Cd)	IIw-2/2	Statewide Importance	23.3 (9.4)
1.46 (2.3)	Camarillo Loam, Sandy Substratum (Ce)	IIw-2/2	Statewide Importance	8.8 (3.6)
0.97 (1.6)	Camarillo Sandy Loam (Cc)	IIw-2/2	Statewide Importance	5.9 (2.4)
0.2 (0.3)	Cropley Clay (0-2 Percent Slopes) (CyA)	IIs-2/3	Prime	1.2 (0.5)
0.2 (0.3)	Garretson Loam (2-9 Percent Slopes) (GaC)	Ile-1/1	Prime	1.2 (0.5)
0.61 (1.0)	Gullied Land (GxG)	NA	Other	3.7 (1.5)

Table 4.5-2 Soil Types Along the Center Road Pipeline Routes and the Amount of Acres Disturbed

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
0.57 (0.9)	Hueneme Loamy Sand, Loamy Substrate (Hm)	Ilw-2/3	Prime	3.5 (1.4)
2.83 (4.6)	Hueneme Sandy Loam (Hn)	Ilw-2/2	Prime	17.2 (7.0)
2.16 (3.5)	Pacheco Silty Clay Loam (Pa)	Ilw-2/2	Statewide Importance	13.1 (5.3)
0.23 (0.4)	Rincon Silty Clay Loam (2-9 Percent Slopes) (RcC)	Ile-3/3	Prime	1.4 (0.6)
0.11 (0.2)	Sorrento Loam (2-9 Percent Slopes) (SwC)	Ile-1/1	Statewide Importance	0.7 (0.3)
0.2 (0.3)	Zamora Loam (2-9 Percent Slopes) (ZmC)	Ile-1/1	Statewide Importance	1.2 (0.5)
		Total	Statewide Importance	52.3 (21.2)
		Total	Prime	25.2 (10.2)

1. Soil Capability Designations:

- II Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- e Limitation due to erosion unless close-growing plant cover is maintained.
- w Water in or on the soil interferes with plant growth or cultivation (corrected by artificial drainage).
- s Soil is limited mainly because it is shallow, droughty, or stony.
- 1 Potential or actual erosion hazard.
- 2 Poor drainage or overflow hazard.
- 3 Slow or very slow permeability in subsoil or substratum.
- 4 Coarse or gravelly texture.
- 5 Fine or very fine texture.

2. Grades range from 1 to 6, with Grade 1 soils having few or no limitations that restrict use for crops and Grade 6 soils that are not suited for farming.

3. CDOC 1998.

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2 The USDA Natural Resources Conservation Service (NRCS) uses two systems to
3 determine a soil's agricultural productivity: the Soil Capability Classification System and
4 the Storie Index Rating System. The Soil Capability Classification System considers
5 soil limitations and soil response to treatment. Capability classes range from Class I
6 soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable
7 for agriculture. The Storie Index Rating System ranks soil characteristics according to
8 their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or
9 no limitations for agricultural production, to Grade 6 soils (a rating of less than 10),
10 which are not suitable for agriculture.

Table 4.5-3 Soil Types Along the Line 225 Pipeline Loop Routes and the Amount of Acres Disturbed

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
Line 225 Pipeline Loop				
0.13 (0.2)	Castaic-Balcolm Silty Clay Loams (30-50 Percent Slopes, Eroded) (CmF2)	Vle-1/1	Other	0.8 (0.3)
1.61 (2.6)	Hanford Sandy Loam (0-2 Percent Slopes) (HcA)	IVec-1/1	Prime	9.8 (4.0)
0.32 (0.5)	Hanford Sandy Loam (2-9 Percent Slopes) (HcC)	IVec-1/2	Prime	1.9 (0.8)
0.08 (0.1)	Metz Loamy Sand (0-2 Percent Slopes) (MfA)	Ils-4 ⁴ /1	Prime	0.5 (0.2)
0.05 (0.1)	Metz Loamy Sand (2-5 Percent Slopes) (MfC)	Ils-4 ⁴ /1	Other	0.3 (0.1)
0.63 (1.0)	Mocho Sandy Loam (0-2 Percent Slopes) (MoA)	I-1 ⁴ /1	Prime	3.8 (1.5)
0.37 (0.6)	Ojai Loam (15-30 Percent Slopes) (OgE)	Vle-1/3	Other	2.2 (0.9)
0.66 (1.1)	Ojai Loam (2-9 Percent Slopes) (OgC)	IIle-1 ⁴ /3	Prime	4.0 (1.6)
0.86 (1.4)	Ojai Loam (30-50 Percent Slopes) (OgF)	VIIle-1/5	Other	5.2 (2.1)
0.07 (0.1)	Riverwash (Rg)	VIIIw-4/6	Other	0.4 (0.2)
0.92 (1.5)	Sandy Alluvial Land (Sa)	VIIw-4/6	Other	5.6 (2.3)
0.79 (1.3)	Sorrento Loam (0-2 Percent Slopes) (SsA)	I-1 ⁴ /1	Prime	4.8 (1.9)
0.87 (1.4)	Yolo Loam (0-2 Percent Slopes) (YoA)	I-1 ⁴ /1	Prime	5.3 (2.1)
		Total	Prime	30.1 (12.2)
0.91 (1.5)	Sorrento Loam (0-2 Percent Slopes) (SsA)	I-1 ⁴ /1	Prime	5.5 (2.2)
0.02 (0.03)	Mocho Loam (0-2 Percent Slopes) (MpA)	I-1 ⁴ /1	Prime	0.1 (0.04)
0.06 (0.1)	Mocho Sandy Loam (0-2 Percent Slopes) (MoA)	I-1 ⁴ /1	Prime	0.4 (0.2)
0.06 (0.1)	Riverwash (Rg)	VIIIe-16	Other	0.4 (0.2)
0.11 (0.2)	Sandy Alluvial Land (Sa)	VIIw-4/6	Other	0.7 (0.3)
0.12 (0.2)	Terrace Escarpments (TsF)	VIIe-1/6	Other	0.7 (0.3)

Table 4.5-3 Soil Types Along the Line 225 Pipeline Loop Routes and the Amount of Acres Disturbed

Miles (km)	Soil Association	Soil Capability/ Grade ^{1,2}	Farmland Type ³	Acres (Hectares) (50-foot [15-meter] right-of-way)
0.21 (0.3)	Zamora Loam (2-9 Percent Slopes) (ZaC)	Ile-1 ⁴ /1	Prime	1.3 (0.5)
		Total	Prime	7.3 (3.0)

1. Soil Capability Class Designations:
 - II Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices.
 - III Soils with severe limitations that reduce the choice of plants, require special conservation practices, or both.
 - VIII Soils and landforms with limitations that preclude their use for commercial plant production and restrict use to recreation, wildlife habitat, or water supply.
 - c Limitation is climate that is too cold or too dry.
 - e Limitation due to erosion unless close-growing plant cover is maintained.
 - w Water in or on the soil interferes with plant growth or cultivation (corrected by artificial drainage).
 - 1 Potential or actual erosion hazard.
- NA Not Applicable
2. Soil Grades - Grades range from 1 to 6, with Grade 1 soils having few or no limitations that restrict use for crops and Grade 6 soils that are not suited for farming.
3. CDOC 1995
4. Capability classes are only provided for irrigated soils for these soils classifications. These soils are presumed not to be irrigated.

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2 4.5.2 Regulatory Setting

3 Federal and State regulations applicable to agricultural resources include the Farmland
 4 Protection Policy Act, the California Land Conservation (Williamson) Act, and the
 5 California Department of Conservation Farmland Mapping and Monitoring Program.
 6 The CDC Farmland Mapping and Monitoring Program identifies and designates lands
 7 according to categories defined in the Farmland Protection Policy Act. Under the
 8 Williamson Act, a landowner enters into a contract, agreeing to protect the land's open
 9 space or agricultural values in order to receive reduced property taxes. Williamson Act
 10 lands are present in Ventura County, but not in Los Angeles County.

11 The major Federal, State, and local laws and regulations pertaining to agriculture and
 12 soils are summarized in Table 4.5-4 below.

Table 4.5-4 Major Laws, Regulatory Requirements, and Plans for Agriculture and Soils

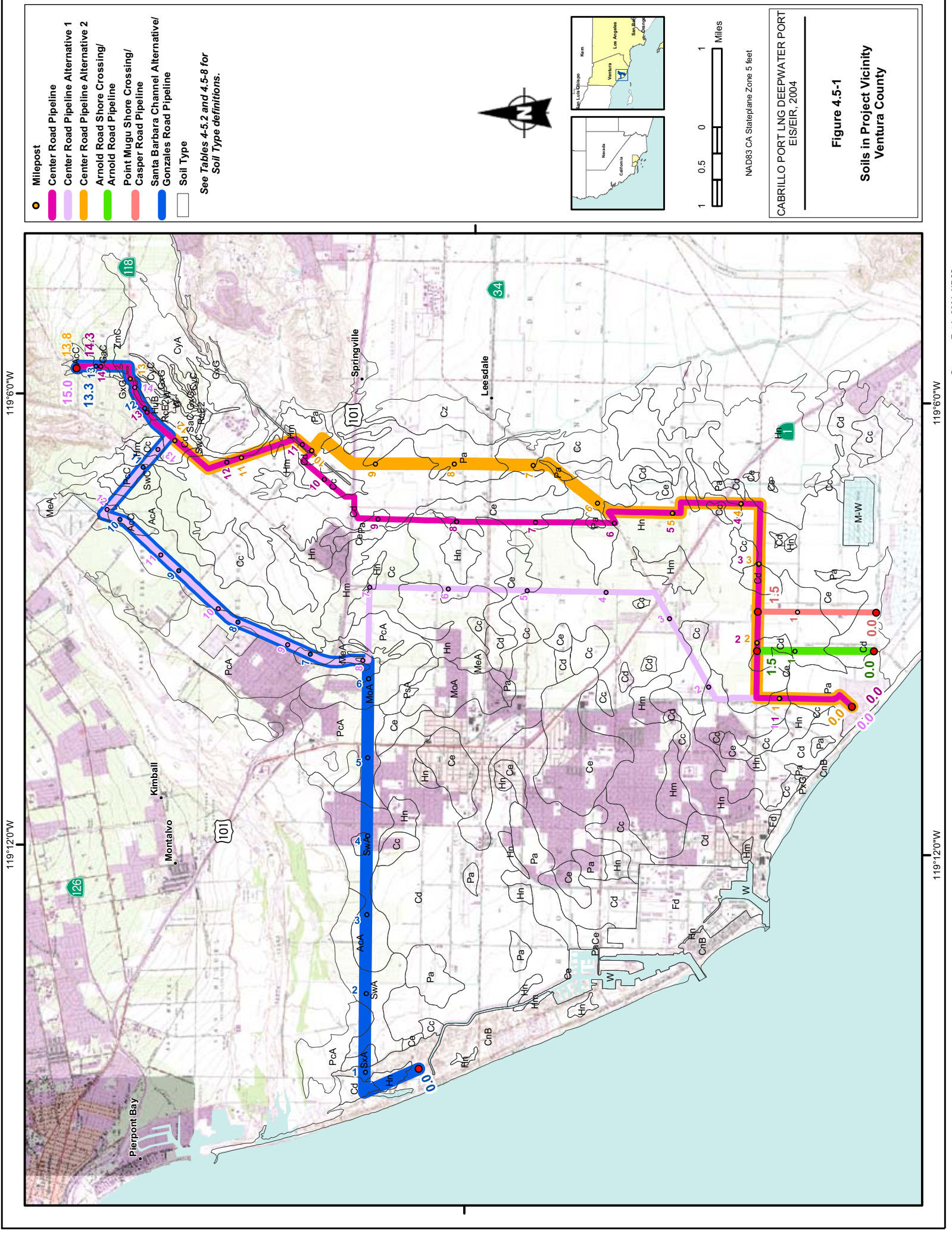
Law/Regulation/Plan/ Agency	Key Elements and Thresholds; Applicable Permits
Federal	
<p>Farmland Protection Policy Act (FPPA) (7 United States Code [USC] 4201 et seq.) - <i>Natural Resources Conservation Service of the Department of the Interior (DOI)</i></p>	<p>The FPPA is intended to minimize the impact that Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It ensures that—to the extent possible—Federal programs are administered to be compatible with state and local units of government, and private programs and policies, to protect farmland. The FPPA does not authorize the Federal Government to regulate the use of private or non-Federal land or, in any way, to affect the property rights of owners.</p>
	<p>For the purpose of the FPPA, <i>farmland</i> includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.</p> <p>(1) Prime Farmland Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to two years) before the mapping date of 2002 (or since 1998).</p> <p>(2) Farmland of Statewide Importance Farmland of statewide importance is land similar to prime farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles before the mapping date (or since 1998).</p> <p>(3) Unique Farmland Unique farmland is land of lesser-quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles before the mapping date (or since 1998).</p>
	<p>(4) Farmland of Local Importance Farmland of local importance is land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee. Farmland of local importance in Los Angeles County includes lands that do not qualify as prime, statewide, or unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would meet the prime or statewide designation and have been improved for irrigation, but are now idle; and lands that currently support confined livestock, poultry operations, and aquaculture.</p> <p>Requires the completion of Form NRCS-APC-106.</p> <p>Applicability: The pipeline corridor would cross prime farmland and farmland of statewide importance.</p>

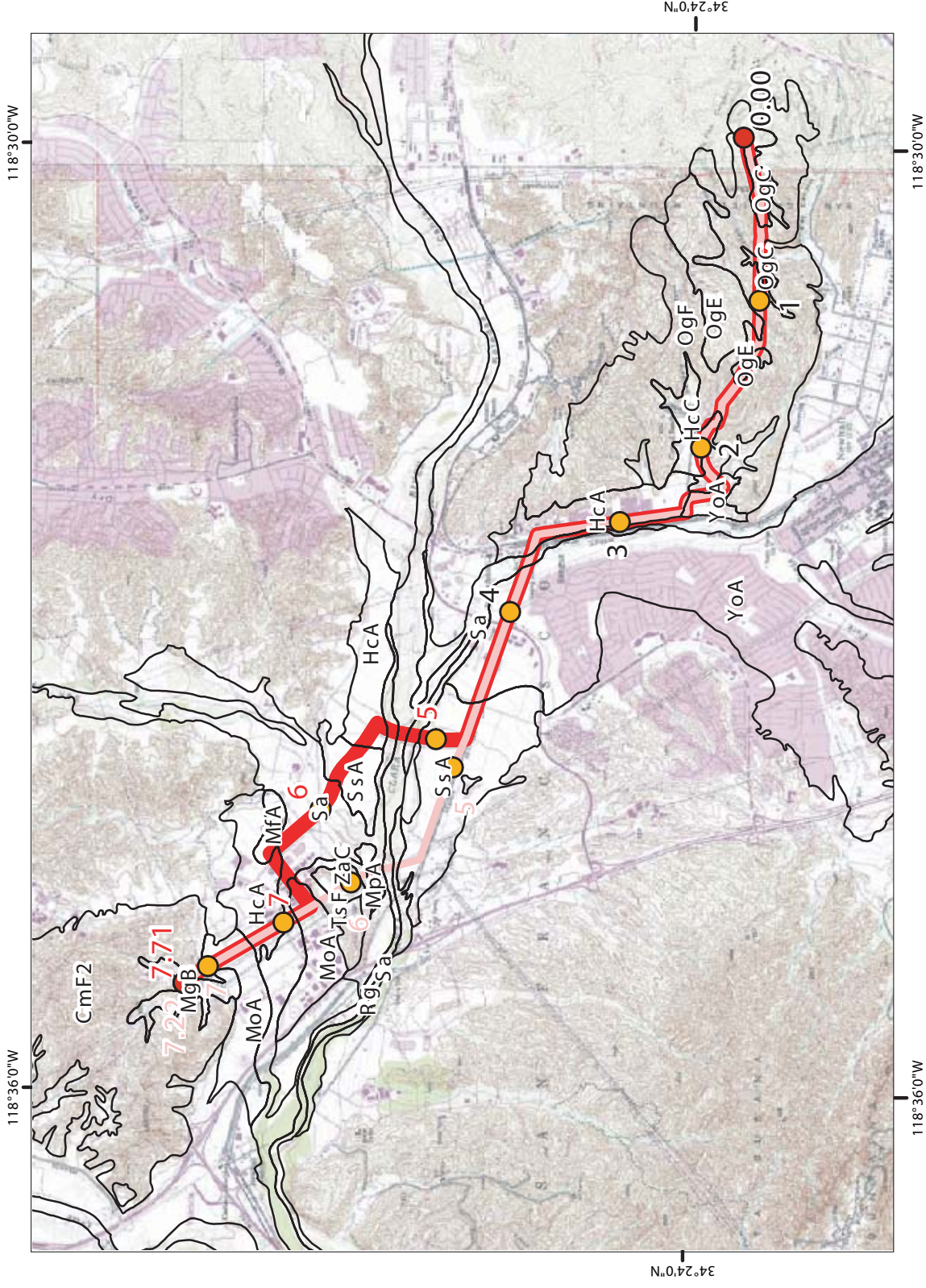
Table 4.5-4 Major Laws, Regulatory Requirements, and Plans for Agriculture and Soils

Law/Regulation/Plan/ Agency	Key Elements and Thresholds; Applicable Permits
State	
California Department of Conservation (CDOC) Farmland Mapping and Monitoring Program (FMMP) - CDOC	<p>Using Soil Conservation Service soil classifications and other information, CDOC develops "Important Farmland Maps." The purpose of CDOC's FMMP is to provide land use conversion information for decision makers to use in their planning for the present and future of California's agricultural land resources. Land not recently farmed does not show up on the "Important Farmland" series of maps. Before removing unfarmed land from the maps, CDOC waits two mapping cycles (four years). The "Important Farmland Maps" and the advisory guidelines for the FMMP identify five agriculture-related categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land.</p> <p>Applicability: The pipeline corridor would cross prime farmland and farmland of statewide importance.</p>
California Land Conservation Act of 1965 (Williamson Act) - California Department of Conservation Division of Land Resource Protection	<p>The Williamson Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict their land to agricultural and compatible open-space uses. The vehicle for these agreements is a rolling term 10-year contract called a <i>Land Conservation Contract</i>. The contract term is automatically renewed for one additional year each year thereafter, unless the landowner or the County files a notice of nonrenewal. In return for the voluntary restriction, contracted parcels are assessed for property tax purposes at a rate consistent with their actual (agricultural) use, rather than potential market value.</p> <p>Applicability: The Project lands in Los Angeles County are not under a Williamson Act contract (EIP 2004). The proposed pipeline and alternative routes in Ventura County would cross through Williamson Act contract lands.</p>
California Coastal Commission (CCC), California Coastal Act (CCA) including 30241-30243	<ul style="list-style-type: none"> Established a coastal management program containing a comprehensive set of policies and requiring the establishment of a local coastal program within each coastal jurisdiction. Provides a framework for the protection of coastal lands and the orderly management of coastal development. Implemented at the local level through local coastal programs. Ensures that ultimate control of the use of coastal areas is retained by the state. For agricultural lands within the coastal zone, Coastal Act 30241 requires prime agricultural land to be maintained in agricultural production; 30242 prevents the conversion of agricultural uses to non-agricultural uses; and 30243 protects long long-term productivity of soils.
Local	
- Ventura County and City of Oxnard Save Our Agricultural Resources (SOAR) Ordinances	<ul style="list-style-type: none"> SOAR ordinances are based on the General Plan of the jurisdiction to which they apply and are local land use regulations that have binding legal authority. SOAR places restrictions on the expansion of a City Urban Restriction Boundary (CURB) or restricts the conversion of farmland and open-space lands to urban uses. However, SOAR does not provide permanent protection for open space or farmland; does not acquire parkland or provide recreation facilities; and does not limit the types of uses permitted in agricultural, open-space, or rural zones. The SOAR ordinances, in most cases, will "sunset" by 2020 or 2030.

Table 4.5-4 Major Laws, Regulatory Requirements, and Plans for Agriculture and Soils

Law/Regulation/Plan/ Agency	Key Elements and Thresholds; Applicable Permits
- <i>City of Oxnard/ Ventura County Local Area Formation Commission (LAFCO)</i>	<ul style="list-style-type: none"> • Applicability (including permits/approvals required): The Ventura LAFCO considers General Plan consistency, including SOAR ordinances and CURB lines, when making decisions regarding city annexations and sphere of influence amendments. Even though the LAFCO is not bound by SOAR ordinances or CURB lines, because they are local land use regulations tied to local agricultural and open-space General Plan designations and/or the ability to extend services, the policy of the Ventura LAFCO is to not allow city annexations or sphere of influence amendments into areas covered by a SOAR ordinance or outside the CURB line of a city. Thus, if a SOAR ordinance requires voter approval to convert land designated agricultural or open space on a General Plan to another land use, or voter approval to extend city services, the Ventura LAFCO requires that the voters approve such a change before LAFCO action on any proposal to amend a city's sphere of influence or involving annexation to a city.
- <i>Ventura County Right-to-Farm Ordinances Ventura County</i>	<ul style="list-style-type: none"> • Ventura County has a Right-to-Farm ordinance that provides some protection to farmers against nuisance claims and frivolous lawsuits involving legal and accepted farming practices. The measure requires realtors to disclose potential conflicts with agriculture (e.g., pesticide smells, noise from machinery, and pesticide use) when properties adjacent to agricultural parcels are for sale. It also provides measures to mediate disputes between neighboring cities.





- Milepost
 - Soil type
 - Line 225 Pipeline Loop
 - Line 225 Pipeline Loop Alternative
- See Tables 4.5-2 and 4.5-8 for soil type definitions



0.5 0 0.5 Miles
NAD83 CA Stateplane Zone 5 feet

Cabrillo Port LNG Deepwater Port
EIS/EIR, 2004

Figure 4.5-2
Soils Along the Line 225 Loop and
Alternative Pipeline Routes

4.5.3 Significance Criteria

For the purposes of the draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR), agricultural resources impacts are considered significant if the Project would:

- Convert prime farmland or farmland of statewide importance to non-agricultural uses;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Change the existing environment, which, because of location or nature, could result in conversion of farmland to non-agricultural use;
- Cause substantial soil erosion or the loss of topsoil;
- Cause the permanent loss of agricultural soils that exceeds Ventura County criteria (prime/statewide 5 to 20 or more acres (2 to 8 ha) depending on General Plan land use designation);
- Adversely affect the quantity or quality of water used for agricultural production;
- Impair the productivity of adjacent agricultural areas;
- Substantially increase pests and/or disease in nearby agricultural areas;
- Pose substantial land use incompatibilities with adjacent property currently in or suitable for agricultural production; or
- Cause the cumulative loss of agricultural soils if there is a loss of 1 acre (0.4 ha) of prime/statewide or 2 acres (0.8 ha) of unique farmland.

4.5.4 Impact Analysis and Mitigation

This subsection address impacts associated with the loss of agricultural land and the loss of productivity of agricultural lands due to Project activities. Other potential impacts that could affect agriculture, such as erosion, soil contamination, and introduction of noxious weeds, are addressed in Subsections 4.19, "Water Quality and Sediments"; 4.12, "Hazard Materials"; and 4.8, "Terrestrial Biology," respectively. Land use incompatibilities are discussed in Subsection 4.13, "Land Use." Alteration of irrigation systems is addressed in Subsection 4.19 "Water Quality and Sediments."

This section describes the impacts to agriculture and soil associated with construction and operation of the proposed Project. Table 4.5-5, below, is a summary of identified impacts and mitigation measures, and additional detail follows. Applicant proposed measures (AMM) and agency recommended mitigation measures (MM) are defined in Section 4.1.

Table 4.5-5 Summary of Agriculture and Soil Resources Impacts and Mitigation Measures

Impact	Mitigation Measure(s)
AGR-1: Construction activities could temporarily cause a loss of agricultural land, crops, or crop production. Operations could cause a loss of agricultural land, crops, or crop production. Agricultural land that is preserved under the Williamson Act could be converted from agricultural land to non-agricultural land (Class II).	AMM AGR-1a. Compensation. Compensation to landowners for temporary use of agricultural land. MM AGR-1b. Compensation for Temporary Loss of Agricultural Land. Compensation shall be in the amount of the fair market value of the easements, losses or changes determined through an appraisal conducted by an independent appraiser, or a mutually agreed-upon settlement reached between the Applicant and the landowner.
AGR-2: Construction activities could result in topsoil and subsoil mixing and/or soil compaction, thereby reducing agricultural productivity (Class II).	MM AGR-2a. Topsoil Salvage and Replacement. For agricultural lands, the Applicant shall ensure that the upper 12 inches (0.3 m) of topsoil is salvaged and replaced wherever the pipeline is trenched. MM AGR-2b. Landowner Compensation for Soil Productivity Losses. The Applicant shall negotiate with landowners the measures landowners would like undertaken to ensure that soil productivity is maintained. MM TerrBio-5a. Weed management plan for all actively cultivated agricultural lands disturbed by onshore pipeline construction, as applicable.
AGR-3: Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity (Class II).	AMM AIR-5a. Construction Fugitive Dust Plan. The Applicant would develop and implement a Construction Fugitive Dust Control Plan. MM AGR-3a. Meet Water Quality Standards. All water used for dust suppression shall meet all applicable water quality discharge standards and have obtained any applicable discharge approvals.
AGR-4: Loss of tree rows could reduce agricultural productivity (Class II).	MM TerrBio-3b. Tree Avoidance and Replacement. The Applicant shall, to the extent possible, avoid, minimize, and compensate for impacts on trees by implementing measures.

1

2 **Impact AGR-1: Loss of Agricultural Land**

3 ***Construction activities could temporarily cause a loss of agricultural land, crops,***

4 ***or crop production. Operations could cause a loss of agricultural land, crops, or***

5 ***crop production. Agricultural land that is preserved under the Williamson Act***

6 ***could be converted from agricultural land to non-agricultural land (Class II).***

7 Construction would occur in an 80-foot (24 meter [m]) right-of-way (30 feet [9 m] of

8 which is non-agricultural road shoulder) in agricultural areas. The right-of-way (ROW)

9 would be restored to its original use after construction. Where trees are present, the

10 loss would be permanent. The Center Road Pipeline would temporarily disturb

11 approximately 47.6 acres (19 ha) of farmland of statewide importance and

12 approximately 25 acres (10 ha) of prime farmland (see Table 4.5-6). The Line 225

Table 4.5-6 Acreage of Prime Farmland Soils and Farmland Soils of Statewide Importance Disturbed and Converted During Construction and Operations

	Prime Farmland Soils (acres/hectares)		Farmland Soils of Statewide Importance (acres/hectares)		Total Agricultural Soil (acres/hectares)	
	Disturbed	Converted	Disturbed	Converted	Disturbed	Converted
Proposed Center Road Pipeline Route	25.0/10.1	<1/<0.4	47.6/59.7	0/0	72.6/29.4	<1/<0.4
Center Road Pipeline Alternative 1	60.2/24.4	<1/<0.4	27.2/11.0	0/0	87.4/35.4	<1/<0.4
Center Road Pipeline Alternative 2	25.1/10.2	<1/<0.4	52.3/21.2	0/0	77.4/31.3	<1/<0.4
Line 225 Pipeline Loop	30.1/12.2	0/0	0/0	0/0	30.1/12.2	0/0
Line 225 Pipeline Loop Alternative	7.3/3.0	0/0	0/0	0/0	7.3/3.0	0/0

1

2 Pipeline Loop would cross an estimated 30.1 acres (12 ha) of prime farmland soils;

3 however, none of these lands are in agricultural production.

4 Construction activities would occur over a relatively short period of time (less than four

5 months); however, agricultural land in the construction ROW would be taken out of

6 production for this period and therefore could miss a growing season. Typically, this

7 period is two production cycles for the field. For sod farms, this may be a few months.

8 For other crops, it could be a year. The Center Road Valve Station would expand by

9 4,250 square feet (395 square meters), or approximately 0.1 acre (0.04 ha), resulting in

10 the permanent removal of approximately 50 citrus trees. Land in this area is classified

11 as prime farmland. According to the Ventura County (2000) Initial Study Assessment

12 Guidelines, the conversion of 5 to 20 or more acres (2 to 8 ha), depending on its

13 General Plan land designation, of "prime/statewide importance" farmland would result in

14 a significant impact. Because the Project would convert less than 1 acre (0.4 ha) of

15 prime farmland to non-agricultural use, the impact would be less than significant. The

16 NRCS has evaluated the proposed routes and determined that there would be no

17 significant impact to agricultural lands under its jurisdiction (Jewett 2004 and Nguyen

18 2004).

19 The proposed pipeline route would cross approximately 10 acres (4 ha) of agricultural

20 lands that are, according to the City of Oxnard (1990) 2020 General Plan, part of the

21 Williamson Act. These lands could not be cultivated during construction, but would

22 return to agricultural use after completion of construction activities; therefore, there

23 would be no significant impact on Williamson Act lands. There are no known agricultural

24 lands or Williamson Act lands along the proposed Line 225 Pipeline Loop; therefore, no

25 agricultural lands would be converted to non-agricultural uses. Therefore, this Project

26 would not adversely impact Williamson Act lands.

27

The Applicant has incorporated the following into the proposed Project:

AMM AGR-1a. Compensation. Per standard Southern California Gas Company (SoCalGas) right-of-way acquisition procedures, compensation to landowners for temporary construction easement, crop loss, or change in crop production would be determined by fairly appraised value. Compensation would be paid to the owner based on the amount of time in which the right-of-way remains fallow as a result of construction.

Mitigation Measure for Impact AGR-1: Loss of Agricultural Land

MM AGR-1b. Compensation for Temporary Loss of Agricultural Land. Compensation shall be in the amount of the fair market value of the easements, losses or changes determined through an appraisal conducted by an independent appraiser, or a mutually agreed-upon settlement reached between the Applicant and the landowner. Payment shall be made no later than 45 days after the completion of construction. Dispute resolution shall be conducted by a mutually agreed upon arbitrator if a settlement is not reached 60 days prior to the start of construction. The arbitrator shall be compensated by the Applicant.

This impact would be reduced to less than significant with the implementation of these measures.

Impact AGR-2: Topsoil Mixing and Compaction

Construction activities could result in topsoil and subsoil mixing and/or soil compaction, thereby reducing agricultural productivity (Class II).

Where construction occurs in agricultural areas, the concentrated movement of construction equipment could result in mixing of topsoil and the relatively infertile subsoil, thereby diluting the productivity of the soil. The use of heavy equipment could also result in rutting, which could lead to mixing of topsoil and subsoil, especially in excessively wet conditions. Inadequate compaction of the trench backfill could result in soil subsidence over the pipeline and thereby alter drainage patterns, while severe over-compaction could impede vegetation growth because of restricted movement of air and water into the soil.

In general, soil compaction is a problem associated with fine-texture and/or organic-rich soils with high moisture content. Soils most prone to compaction are generally somewhat poorly drained and often hydric. Compaction can reduce porosity, infiltration, and aeration of the soil. These properties are important for plant health. The most productive part of the soil column is the topsoil or top five to 12 inches (0.3 m) of soil. If the topsoil is mixed with subsoil, then its productivity is lost.

Approximately 72.6 acres (41.5 ha) of agricultural soils would be disturbed by the construction of the Center Road Pipeline route, based on an average 80-foot (24 m) ROW.

Approximately 30.1 acres (12 ha) of agricultural soil would be disturbed (based on an average 80-foot [24 m] ROW) along the proposed Line 225 Pipeline Loop; however, loss of soil productivity is less of a concern for this route because it would traverse urban, residential, commercial, and industrial lands, and none of the undeveloped areas are agricultural.

Mitigation Measures for Impact AGR-2: Topsoil Mixing and Compaction

MM AGR-2a. Topsoil Salvage and Replacement. The Applicant shall comply with all aspects of the **MM TerrBio-5a - Weed Management Plan** for all actively cultivated agricultural lands disturbed by onshore pipeline construction, as applicable. In addition, for agricultural lands, the Applicant shall ensure that the upper 12 inches (0.3 m) of topsoil (or less depending on the existing depth of the topsoil) is salvaged and replaced wherever the pipeline is trenched.

MM AGR-2b. Landowner Compensation for Soil Productivity Losses. The Applicant shall negotiate with landowners the measures landowners would like undertaken to ensure that soil productivity is maintained. Dispute resolution shall be conducted by a mutually agreed upon arbitrator if a written settlement is not reached before 60 days prior to the start of construction. The arbitrator shall be compensated by the Applicant.

This impact would be reduced to less than significant with the implementation of the mitigation measures described above.

Impact AGR-3: Dust Deposition

Dust generated during construction could be deposited on adjacent agricultural lands with planted crops, temporarily reducing productivity (Class II).

As discussed previously, the Center Road Pipeline route would traverse approximately 14 miles (22.5 km) of agricultural fields. Dust generated during grading and construction activities could adversely impact agricultural production by creating conditions suitable for increased pest infestation. High wind events (winds greater than 25 mph) would disperse any dust generated during construction.

Mitigation Measures for Impact AGR-3: Dust Deposition

MM AGR-3a. Meet Water Quality Standards. All water used for dust suppression shall meet all applicable water quality discharge standards and have obtained any applicable discharge approvals.

Water to agricultural field shall not be treated with chemicals such that it could adversely affect agricultural fields.

AMM AIR-5a. Construction Fugitive Dust Plan also applies here (see Section 4.6, "Air Quality").

Implementation of these measures would reduce the impact to less than significant.

Impact AGR-4: Loss of Tree Rows

Loss of tree rows could reduce agricultural productivity (Class II).

Tree rows provide a windbreak for agricultural fields, decreasing stresses on individual plants and thus allowing them to grow with fewer disturbances. Along the Center Road Pipeline route, 6.11 acres (2.5 ha) of tree rows would potentially be disturbed (see Table 4.8-3). There are no known tree rows along the Line 225 Pipeline Loop.

Mitigation Measures for Impact AGR-4: Loss of Tree Rows

MM TerrBio-3b. Tree Avoidance and Replacement applies here (see Section 4.8, "Biological Resources – Terrestrial").

This impact would be reduced to less than significant with the implementation of this mitigation measure.

4.5.5 Alternatives

4.5.5.1 No Action Alternative

The No-Action alternative means that the Project would not go forward and the floating storage and regasification unit (FSRU), associated subsea pipelines, onshore odorization facility, and onshore pipelines would not be installed. In that case, the energy needs identified in Section 1.3 would likely be addressed through other means, e.g., other energy-related projects, implementation of energy conservation measures, or through economic measures (increased pricing) to reduce energy consumption. Any of those scenarios could result in lesser or greater impacts than the proposed Project but cannot be predicted with any certainty at this time.

Under this alternative, no agricultural land would be disturbed or converted to any other purpose.

4.5.5.2 Alternative DWP—Santa Barbara Channel/Mandalay Shore Crossing/Gonzales Road Pipeline

Siting of the Project in the Santa Barbara Channel would have types of impacts (i.e., topsoil mixing and dust deposition) similar to those of the Proposed Project. However, there are fewer miles of land in agricultural production (see Table 4.5-7); therefore,

Table 4.5-7 Representative Agriculture Present Along the Santa Barbara Channel/Mandalay Shore Crossing/Gonzales Road Pipeline

Milepost	Representative Agriculture
0-1	Strawberries, Fallow
1-2	Fallow, Sod, Orchard
2-3	Sod, Orchard, Strawberries, Tree Rows, Row Crops
3-4	Row Crops, Fallow, Sod
4-5	NA
5-6	NA
6-7	Strawberries, Row Crops
7-8	Row Crops, Fallow
8-9	Sod, Fallow
9-10	Fallow, Strawberries, Orchard
10-11	Fallow, Orchard
11-12	Fallow, Orchard
12-Center Road Valve Station	Strawberries, Row Crops, Orchard

Source: Ecology and Environment, Inc. 2004

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Table 4.5-8 Santa Barbara Channel/Mandalay Shore Crossing/Gonzales Road Pipeline Soils

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
3.28 (5.3)	Anacapa Sandy Loam (0-2 Percent Slopes) (AcA)	Ils-4/1	Prime	19.9 (8.1)
0.83 (1.3)	Anacapa Sandy Loam (2-9 Percent Slopes) (AcC)	Ile-1/1	Prime	5.0 (2.0)
0.37 (0.6)	Camarillo Loam (Cd)	Ilw-2/2	Statewide Importance	2.2 (0.9)
0.21 (0.3)	Camarillo Sandy Loam (Cc)	Ilw-2/2	Statewide Importance	1.3 (0.5)
0.68 (1.1)	Coastal Beaches (CnB)	VIIIw-4/NA	Other	4.1 (1.7)
0.18 (0.3)	Cropley Clay (0-2 Percent Slopes) (CyA)	Ils-5/3	Prime	1.1 (0.4)
0.14(0.2)	Garretson Loam (2-9 Percent Slopes) (GaC)	Ile-1/1	Prime	0.8 (0.3)
0.37 (0.6)	Gullied Land (GxG)	VIIIe-1/NA	Other	2.2 (0.9)
0.11 (0.2)	Hueneme Loamy Sand, Loamy Substrate (Hm)	Ilw-2/3	Prime	0.7 (0.3)
0.56 (0.9)	Hueneme Sandy Loam (Hn)	Ilw-2/2	Prime	3.4 (1.4)
0.56 (0.9)	Metz Loamy Sand (0-2 Percent Slopes) (MeA)	Ils-4/2	Prime	3.4 (1.4)

Table 4.5-8 Santa Barbara Channel/Mandalay Shore Crossing/Gonzales Road Pipeline Soils

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
0.37 (0.6)	Mocho Loam (0-2 Percent Slopes) (MoA)	I-1/1	Prime	2.2 (0.9)
3.10 (5.0)	Pico Sandy Loam (0-2 Percent Slopes) (PcA)	Ils-4/1	Prime	18.8 (7.6)
0.35 (0.6)	Pico Sandy Loam (2-9 Percent Slopes) (PcC)	Ile-1/2	Prime	2.1 (0.9)
0.37 (0.6)	Rincon Silty Clay Loam (2-9 Percent Slopes) (RcC)	Ile-3/3	Prime	2.2 (0.9)
0.32 (0.5)	Sorrento Loam (0-2 Percent Slopes) (SwA)	I-1/1	Prime	1.9 (0.8)
0.11 (0.2)	Sorrento Loam (2-9 Percent Slopes) (SwC)	Ile-1/1	Statewide Importance	0.7 (0.3)
0.14 (0.2)	Sorrento Silty Clay Loam (0-2 Percent Slopes) (SxA)	I-1/1	Other	0.8 (0.3)
0.11 (0.2)	Zamora Loam (2-9 Percent Slopes) (ZmC)	Ile-1/1	Statewide importance	0.7 (0.3)
12.16 (19.6)		Total	Statewide Importance	4.8 (1.9)
		Total	Prime	61.6 (24.9)

1 Soil Capability Designations:

- i Soils with few limitations that restrict their use.
- ii Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- iii Soils have severe limitations that reduce the choice of plants.
- viii Soils and landforms have limitations that preclude their use for commercial plant production.
- e Limitation due to erosion unless close-growing plant cover is maintained.
- w Water in or on the soil interferes with plant growth or cultivation (corrected by artificial drainage).
- s Soil is limited mainly because it is shallow, droughty, or stony.
 - 1 Potential or actual erosion hazard.
 - 2 Poor drainage or overflow hazard.
 - 4 Coarse or gravelly texture.
 - 5 Fine or very fine texture.

2 Grades range from 1 to 6, with Grade 1 soils having few or no limitations that restrict use for crops and Grade 6 soils that are not suited for farming

3 CDOC 1998

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2 fewer acres of land in agricultural production would be disturbed. The same amount of
 3 land would be converted from agricultural land to non-agricultural land. Therefore, this
 4 alternative would have fewer impacts on agricultural resources than the proposed
 5 alternative. However, more acres of prime farmland soils (61.6 acres [25 ha]) would be
 6 disturbed, compared to the proposed Project (25 acres [10 ha]) (see Table 4.5-8).
 7 Fewer acres of soils of statewide importance (4.8 acres [1.9 ha]) would be disturbed,

1 compared to the proposed Project (47.6 acres [19.2 ha]). MM AGR-1a, MM AGR-2a,
2 and MM AGR-3a and AMM Air-5a would be applied to this alternative to reduce these
3 impacts to insignificant.

4 **4.5.5.3 Alternative Onshore Pipeline Routes**

5 **Center Road Pipeline Alternative 1**

6 Alternative 1 was previously the proposed alternative and would cross fewer agricultural
7 areas than the current proposed route. This alternative would adjoin land in agricultural
8 use for 63 percent of its course. As a result, the potential for impacts on agricultural
9 resources would be the lowest under this alternative. Alternative 1 would also cause
10 the least disturbance to soils classified as farmland of statewide importance, affecting
11 27.2 acres (11 ha). However, Alternative 1 would temporarily disturb the greatest
12 number of acres of soils classified as prime farmland, estimated to be approximately
13 60.2 (24 ha). The NRCS has determined that there would be no significant impact to
14 agricultural lands under their jurisdiction from this alternative (Nguyen 2004 and Jewett
15 2004). This route would cross approximately 9 acres (3.6 ha) of land preserved under
16 the Williamson Act (City of Oxnard 1990); however, none of these lands would be
17 permanently converted to non-agricultural lands. There would be no difference between
18 this alternative and the proposed Center Road Pipeline route in the amount of
19 agricultural land permanently converted to non-agricultural uses. MM AGR-1a, MM
20 AGR-2a, and MM AGR-3a and AMM Air-5a would be applied to this alternative to
21 reduce these impacts to insignificant.

22 **Center Road Pipeline Alternative 2**

23 Much of this alternative route is located in agriculturally dominated areas; 89.7 percent
24 of the land along the route is in agricultural use. As a result, this alternative would have
25 impacts on agricultural resources similar to those under the Center Road Pipeline.
26 Alternative 2 would affect approximately 25.2 acres (10 ha) of prime farmland and
27 approximately 52.3 acres (21 ha) of farmland of statewide importance. There would be
28 no difference between this alternative and the proposed Center Road Pipeline route in
29 the amount of agricultural land permanently converted to non-agricultural uses. The
30 NRCS has determined that there would be no significant impact to agricultural lands
31 under their jurisdiction from this alternative (Nguyen 2004 and Jewett 2004). The
32 amount of Williamson Act land that would be disturbed by this alternative would be the
33 same as that of the proposed route, and, like the proposed route, none of this land
34 would be converted from agricultural use. MM AGR-1a, MM AGR-2a, and MM AGR-3a
35 AMM Air-5a would be applied to this alternative to reduce these impacts to insignificant.

36 **Line 225 Pipeline Loop Alternative**

37 This alternative would cross an estimated 7.3 acres (3 ha) of prime farmland soils and
38 just more than an acre of farmland of statewide importance soils. None of these lands,
39 however, are in agricultural use. Therefore, there would be no agricultural lands taken
40 out of production. The total acres of prime farmland and farmland of statewide

importance soils that would be disturbed cannot be compared with the number of acres disturbed under the proposed route because this alternative would cover only a part of the route. For the equivalent parts of the pipeline routes, this alternative would disturb slightly more prime farmland soils than the proposed route. The NRCS has determined that there would be no significant impact to agricultural lands under their jurisdiction from this alternative (Nguyen 2004 and Jewett 2004). MM AGR-1a, MM AGR-2a, and MM AGR-3a and AMM Air-5a would be applied to this alternative to reduce these impacts to insignificant.

4.5.5.4 Alternative Shore Crossing/Pipeline Route

Arnold Road Shore Crossing/Arnold Road Pipeline

This alternative would use horizontal directional drilling (HDD) to transit to the beach and beach dunes. The pipeline would be trenched through approximately 1.5 miles (2.4 kilometers) of prime farmland soils and farmland of statewide importance soils to Hueneme Road. A total of 4.1 acres (1.7 hectares) of farmland of statewide importance soils would be disturbed, along with 3.1 acres (1.3 hectares) of prime farmland (see Table 4.5-8). The entire route is lined with agricultural fields. No agricultural land would be converted from agricultural uses. The comparable portion of the proposed route transits through an equivalent distance of farmland of state importance soils; therefore, the impacts on agricultural resources and soils would be equivalent. For construction of this alternative, 3.7 acres (1.5 hectares) would be used as a staging area and another 3.7 acres (hectares) for the metering station. The exact locations of these areas are unknown at this time but could be on either agricultural lands or previously developed land.

Impact AGR-5Alt: Potential for Use of Agricultural Land for Staging Areas.

Construction activities associated with staging areas could temporarily cause a loss of agricultural land, crops, or crop production. Operations could cause a loss of agricultural land, crops, or crop production. Agricultural land that is preserved under the Williamson Act could be converted from agricultural land to non-agricultural land (Class II).

Mitigation Measures for Impact AGR-5Alt: Loss of Tree Rows

MM AGR-5Alt. Potential for Use of Agricultural Land for Staging Areas.
Staging areas will be located on non-agricultural lands.
Construction activities would use existing developed land
installation and HDD activities.

This impact would be reduced to less than significant with the implementation of this mitigation measure.

1

Table 4.5-9 Arnold Road Shore Crossing/Arnold Road Pipeline

Miles (km)	Soil Association	Soil Capability/ Grade^{1,2}	Farmland Type³	Acres (Hectares) (50-foot [15-meter] right-of-way)
0.04 (0.1)	Coastal Beach (CnB)	VIIIw-4/NA	Other	0.2 (0.1)
0.68 (1.1)	Camarillo Loam (Cd)	IIw-2/2	State wide Importance	4.1 (1.7)
0.51 (0.8)	Hueneme Sandy Loam (Hn)	IIw-2/2	Prime	3.1 (1.3)
0.40 (0.6)	Tidal Flats (Ts)	VIIIw-6/NA	Other	2.4 (1.0)

1. Soil Capability designations:
 - II Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices.
 - W Water in or on the soil interferes with plant growth or cultivation (corrected by artificial drainage).
 - 2 Poor drainage or overflow hazard.
 - 4 Coarse or gravelly texture.
 - 6 Excess salts or alkali.
- 2 Grades range from 1 to 6, with Grade 1 soils having few or no limitations that restrict use for crops and Grade 6 soils that are not suited for farming.
- 3 CDOC 1998

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3 Point Mugu Shore Crossing/Casper Road Pipeline

4 This alternative would use HDD to transit to the beach, wetlands, and duck ponds.
 5 Then, the pipeline would be trenched through approximately 1.5 miles (2.4 kilometers)
 6 of prime farmland soils and farmland of statewide importance soils to Hueneme Road.
 7 A total of 4.5 acres (1.8 hectares) each of farmland of statewide importance soils and
 8 prime farmland would be disturbed (Table 4.5-9). The entire route is lined with
 9 agricultural fields. No agricultural land would be converted from agricultural uses. The
 10 comparable portion of the proposed route transits through an equivalent distance of
 11 farmland of state importance soils; therefore, the impacts on agricultural resources and
 12 soils would be equivalent. However, this alternative would require land for a HDD
 13 turnaround point. This would be located on fill and therefore would not impact
 14 agricultural soils. For construction of this alternative, 3.7 acres (1.5 hectares) would be
 15 used as a staging area and another 3.7 acres (1.5 hectares) for the metering station.
 16 The exact locations of these areas are unknown at this time but could be on agricultural
 17 lands or on previously developed land.

18

1

Table 4.5-10 Point Mugu Shore Crossing/Casper Road Pipeline

Miles (km)	Soil Association	Soil Capability/ Grade ^{1,2}	Farmland Type ³	Acres (Hectares) (50-foot [15-meter] right-of-way)
0.07 (0.1)	Coastal Beach (CnB)	VIIIw-4/NA	Other	0.4 (0.2)
0.18 (0.3)	Camarillo Loam (Cd)	IIw-2/2	Statewide Importance	1.1 (0.5)
0.40 (0.6)	Fill Land (Fd)	IVw-4/NA	Other	2.4 (1.0)
0.26 (0.4)	Tidal Flats (Ts)	VIIIw-6/NA	Other	1.6 (0.7)
0.56 (0.9)	Camarillo Loam, Sandy Substratum (Ce)	IIw-2/2	Statewide Importance	3.4 (1.4)
0.75 (1.2)	Hueneme Sandy Loam (Hn)	IIw-2/2	Prime	4.5 (1.8)

1. Soil Capability designations:

II Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices.

W Water in or on the soil interferes with plant growth or cultivation (corrected by artificial drainage).

2 Poor drainage or overflow hazard.

4 Coarse or gravelly texture.

6 Excess salts or alkali.

2 Grades range from 1 to 6, with Grade 1 soils having few or no limitations that restrict use for crops and Grade 6 soils that are not suited for farming.

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